

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 6794.

Received at London Office 4 - MAR 1948

Date of writing Report 28.2 1948 When handed in at Local Office 19 Port of Stockholm

No. in Survey held at Västervik Date, First Survey 30.10.47 Last Survey 12.2 1948

Reg. Book. Single on the ~~Turn~~ Screw vessel m.s. "TURÖY" ex "Ironbound" Number of Visits 8

Tons { Gross 502 Net 304

Built at - By whom built - Yard No. MMSN-44 When built -

Owners Messrs. L. Myreböe A/S (L. Myreböe, Mgr.) Port belonging to Bergen, Norway

Oil Engines made at Ashton Under Lyne By whom made Engine Co. Ltd. Engine No. 55242 When made -

Generators made at Alloa, Scotland By whom made Harland Engineering Co. Ltd. Gen. No. PX 3019 When made -

No. of Sets One Engine Brake Horse Power 60 (stated) N. as per Rule 15 Total Capacity of Generators 12 Kilowatts.

Set intended for essential services Yes.

OIL ENGINES, &c.—Type of Engines Heavy Oil Trunk Piston 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders Diameter of cylinders 105 m/m Length of stroke 150 m/m No. of cylinders 4 No. of cranks 4

Lean indicated pressure Firing order in cylinders 1-4-2-3 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 120 m/m

Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) - Revolutions per minute

Flywheel dia. 635 m/m Weight Means of ignition Compr. air Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule 60 m/m Crank pin dia. 60 m/m Crank Webs Mid. length breadth 85 m/m Thickness parallel to axis -

as fitted 60 m/m Mid. length thickness 33 m/m Thickness round eyehole -

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²) -

as fitted 60 m/m as fitted 45 m/m

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted -

Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Lubricating Oil Pumps, No. and size One gear wheel pump.

Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Exhausting Air Pumps, No. - Diameter - Stroke - Driven by -

AIR RECEIVERS:—Have they been made under Survey Engine can be started by hand or by air from main receiver. State No. of Report or Certificate -

Each receiver, which can be isolated, fitted with a safety valve as per Rule -

Are the internal surfaces of the receivers be examined - What means are provided for cleaning their inner surfaces -

Is there a drain arrangement fitted at the lowest part of each receiver -

High Pressure Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

Working Air Receivers, No. - Total cubic capacity - Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

ELECTRIC GENERATORS:—Type Drip proof compound.

Pressure of supply 220 volts. Full Load Current 55 Amperes. Direct or Alternating Current Direct current

Alternating current system, state the periodicity - Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown and off No Generators, are they compounded as per Rule is an adjustable regulating resistance fitted in series with each shunt field Yes

Are all terminals accessible, clearly marked, and furnished with sockets Yes Are they so spaced

Shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes

Are the generators under 100 kw. full load rating, have the makers supplied certificates of test and do the results comply with the requirements -

Are the generators 100 kw. or over have they been built and tested under survey -

Tools of driven machinery other than generator One ballast pump and one compressor (not approved.)

ANS.—Are approved plans forwarded herewith for Shafting (If not, state date of approval) Receivers - Separate Tanks -

Are Torsional Vibration characteristics if applicable been approved (state date of approval) Armature shaft Drawing No. -

PIRE GEAR (Not complete. To be checked by the Bergen Surveyor.

The foregoing is a correct description,

See note at end of report.

To be tested by Bergen Surveyor.

Manufacturer.

003290-003297-0127

Rpt. 4c.
Date of writing
No. in
Pg. Book.
Built at
Owners
Oil Engines
Generators
No. of Sets
Set intended
OIL ENGINE
Maximum pressure
Mean indicated pressure
Is there a belt
Flywheel diameter
Crank Shaft
Flywheel Shaft
Are means provided
Are the cylinders
Cooling Water
Lubricating
Air Compressor
Scavenging
AIR RECEIVER
Each receiver
Can the inter
Is there a draught
High Pressure
Seamless, lap
Starting Air
Seamless, lap
ELECTRIC
Pressure of supply
Alternating
and off
Are all terminals
shielded
the generator
the generator
tails of drive
ANS.—An
ve Torsional
ARE GE

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits
1947:- 30/10, 5 & 14/11, 12 & 30/12. 1948:- 10, 11 & 12/2.
8

Dates of Examination of principal parts—Cylinders 14.11.47 Covers 14.11.47 Pistons 14.11.47 Piston rods

Connecting rods 14.11.47 Crank and Flywheel shafts 14.11.47 Intermediate shafts

Crank shaft
Material Steel 145 Brinell
Elongation
Tensile strength
Identification Marks M.S. & Co. N 5836

Flywheel shaft, Material

Identification marks on Air Receivers

Is this machinery duplicate of a previous case No If so, state name of vessel

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This plant has been examined and tested as per Rules, but as the results were partly found to be unsatisfactory, a subject list was attached to the Interim Certificate as per letter enclosed.

This auxiliary engine which was not built under Special Survey has been installed under my supervision, opened up, examined and the cooling spaces hydraulically tested. The following remain to complete the survey and it is stated that this will be done at Bergen to which port the vessel has proceeded. The Bergen Surveyor has been advised:-

The spare parts to be completed as per Rules and checked.

The starboard air compressor to be hydraulically tested and examined under working conditions.

The generator to be tested and temperature rises noted.

Governor to be tested.

NOTE:-

It has not been possible to obtain the following particulars:-

Date of build of engine and generator.

Max. pressure in cylinders.

Mean indicated pressure.

Revolutions per minute.

Whether the generator is compound wound as per Rules.

No test certificate for the generator available.

The amount of Fee ... Kr. 80:--

When applied for 28/2 1948.

Travelling Expenses (if any) Kr. 20:--

When received 19

Committee's Minute

Assigned

WED 9 1948

A.B. WESTERVIKS VARF

Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation